

## **II. INTRODUCTION**

In response to a request by the Wayland Board of Health, the Community Assessment Unit (CAU) of the Massachusetts Department of Public Health, Bureau of Environmental Health Assessment (MDPH/BEHA) conducted an investigation of cancer incidence in the town of Wayland. In addition, the New England Development (NED)/Dow Neighbors, Inc., a group of citizens in Wayland, have expressed concerns that certain cancer types were possibly elevated in their neighborhood or in the town as a whole. The community was specifically concerned about possible exposures to chemicals originating from the former Dow Chemical site located at 412 Commonwealth Road. According to the 1990 census, the town of Wayland is divided into two smaller geographic areas or census tracts. The Dow Chemical site is located in census tract (CT) 3661. Refer to Figure 1 for census tract locations in Wayland.

In response to these concerns, the MDPH conducted a descriptive epidemiological study of cancer incidence for the town of Wayland as a whole and for each of its two census tracts. The MDPH also reviewed available environmental information and sampling data for the former Dow site to determine if local residents may have been exposed to chemicals originating from the site.

It should be noted that the scope of this investigation was to evaluate cancer incidence in relation to concerns raised about the former Dow site. While the NED/Dow Neighbors, Inc. have also expressed concerns about the occurrence of non-cancer health outcomes (such as autoimmune diseases and adverse reproductive outcomes) in Wayland, such an investigation is not possible

because unlike cancer, these outcomes are not reportable. As a result, this investigation will address cancer incidence only. This report is not a comprehensive evaluation of the environmental investigations that have taken place at the former Dow site, nor is this report a comprehensive evaluation of all health outcomes.

This report is a preliminary investigation that analyzes routinely collected descriptive health outcome data to determine whether the occurrence of selected cancers is unusual and that considers the potential for exposure to chemicals associated with the Dow site. Information from such descriptive analyses can be useful in determining whether or not a common etiology (or cause) of cancers is possible and can serve to identify areas where further public health investigations or actions may be warranted. Such actions may include follow-up environmental investigations or, when an excess of well-established risk factors associated with a disease in a certain geographic area have been identified (i.e., cancer screening, smoking cessation, etc.). The purpose of this evaluation is to report our findings for cancer incidence and discuss them in the context of the available information to determine whether recommendations for follow-up are warranted.